

## **Rachel A. Spencer, University of Georgia**

### ***SUPEH Intern, Summer 2010***

This summer I had the privilege to work under LT Jasen Kunz and LCDR Justin Gerding in the Environmental Health Services Branch of the National Center for Environmental Health at the Centers for Disease Control and Prevention in Atlanta, Georgia. My time in the Summer Program for Environmental Health (SUPEH) allowed me to engage with members of the U.S. Public Health Service and the Epidemiological Intelligence Service on an “anchor project” to research disaster preparedness epidemiology. In addition to this anchor project, I attended multiple programs alongside the Collegiate Leaders in Environmental Health and participated in a variety of field experiences with my fellow SUPEH interns.

Through my anchor project, I learned the process by which state officials request CDC assistance and collaborate to investigate questions of public health significance. In this case, that collaboration took the form of an epidemiological aid or “Epi-Aid.” This investigation focused on a January water outage that took place in two counties in southern Alabama in as a result of an extended and extreme freeze. In this investigation, the CDC strove to provide the state of Alabama with information regarding community health impacts, sources of alternative water, health communications, and the overall effectiveness of agency response and cooperation. By discussing the different aspects of the Epi-Aid with my project mentors, I gained a great deal of knowledge relating not only to epidemiology and environmental health, but the means by which entities cooperate in disaster situations.

My primary in-office project involved both data analysis and document review. Specifically, I examined the subset of data from permitted food facility, or restaurant, surveys. I cross-checked the raw survey data against the electronic database, assuring accuracy and consistency in the reporting of the data. Furthermore, I worked with the electronic database to streamline the subject categories and ensure overall database coherence. As a next step, I analyzed the restaurant survey data to calculate the proportions of responses for each question. From this analysis I determined which questions were of the most relevance to the state and consolidated these results into a comprehensive chart. Concurrent with my data analysis, I assisted in review of the final internal CDC report before submission to the state of Alabama.

Although composition of the discussion and recommendations sections of the report is still under way, my work will help guide the writing of these recommendations and ensure that the information submitted to the state regarding businesses impacted by the water outage is both relevant and useful. Actively engaging with environmental health and epidemiology professionals throughout this endeavor was an excellent way to learn about real-world applications of both disciplines.

In conjunction with internship programming, I accompanied many other summer interns on a variety of field trips. These ranged from visits to the Atlanta Beltline office to the aquarium. Each weekly trip taught me something new about the reality of environmental health in practice.

With my fellow SUPEH interns, I shadowed professionals at the Gwinnett Department of Environmental Health on food, pool, vector control, and land-use inspections. Additionally, we shadowed a USDA Food Safety Inspection Service veterinarian on a tour of three meat processing facilities. We also traveled to Port Canaveral, Florida, with the CDC Vessel Sanitation Program and participated in two cruise ship inspections. The cruise ship inspections helped tie together much of the knowledge we gained on shore-side inspections.

It is an understatement to say that I was privileged to participate in the SUPEH program. I cannot express what an honor it has been to meet and work with so many amazing individuals this summer. My supervisors provided support and encouragement in relation not only to my primary project, but with my endeavors to learn about everything CDC has to offer. The flexibility to meet and talk with a wide range of public health professionals about their careers and experiences aided me greatly in my development both as a student and a person.

This summer I felt immersed in an environment where I learned not only about the challenges inherent to solving problems in environmental health, but in a place where educated and enthusiastic people are working to overcome these challenges. Encountering such a wealth of knowledge at the CDC, and in the other government and non-governmental organizations with which we worked, was a humbling and thrilling experience.

I am currently preparing to enter my last semester at the University of Georgia, and I can say without exaggeration that not a day goes by when I do not recollect a memory or experience from this summer. Rarely does such a relatively short period of time bear such a significant impact on an individual's personal and professional development. I cannot adequately express in words how fortunate I consider myself to have been a part of the SUPEH program. After this internship, I am more aware of the importance of environmental health and eager to spend my life working toward the goal of healthy people living sustainably in a healthy world.

I will forever be grateful to the Environmental Health Services Branch, ORISE, LCDR Gerding, and LT Kunz for making my experiences this summer possible and unforgettable. It is my hope that future students will continue to be as fortunate.